

WHAT IS CLAIMED IS:

1 1. A method for building a product data tracking history of the
2 manufacture of a product of the type which has a processing means, said
3 method utilizing a central computer device operably connected to a
4 communications network, comprising the steps of:

7 assigning a unique product identity code to the product;

8 connecting the product to the communications network;

13 building the product tracking data history using said product
14 specification data with the central computer device.

2. A method as defined in claim 1 wherein said diagnostic tool
comprises at least computer executable instructions recorded on a computer
accessible medium.

3. A method for building a product tracking data history as defined in claim 2 wherein said computer executable instructions comprise at least instructions for determining an inventory of installed components on the product, for storing and reporting said unique product identity code, and wherein said product specification data further comprises an inventory of components installed on the product.

4. A method for building a product tracking data history as defined in claim 1 wherein said step of building the product tracking data history using said product specification data further comprises assigning said unique product identity code to the product tracking data history.

1 5. A method for building a product tracking data history as defined
2 in claim 1 wherein an operator computer device that at least partially controls
3 the manufacture of the product is connected to the communications network,
4 the method further comprising the steps of:

5 placing at least one set of product assembly specifications in a
6 central data depository connected to the central computer device;

7 assigning a unique identity code to each of said set of product
8 assembly specifications;

9 transmitting said product assembly specifications to the operator
10 computer device for use in assembling the product; and,

11 wherein said product specification data further comprises said
12 unique identity code corresponding to said product assembly specifications
13 being transmitted to the operator computer device.

1 6. A method for building a product tracking data history as defined
2 in claim 1 wherein the method further comprises the steps of:

3 providing at least one product performance test protocol;

4 placing said at least one product performance test protocol in a
5 central data repository connected to said central computer device;

6 wherein said step of remotely operating said diagnostic tool over
7 the communications network further comprises causing said diagnostic tool to
8 execute said at least one product performance test protocol, and wherein said
9 product specification data reported by said diagnostic tool further comprises
10 product performance test results.

1 7. A method for building a product tracking data history as defined
2 in claim 6 wherein said method further comprises the step of:

3 assigning a unique test identity code to each of said at least a
4 product performance test protocol; and,

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5 wherein said product specification data reported by said
6 diagnostic tool further comprises said unique test identity code corresponding
7 to said performance test protocol.

1 8. A method for building a product tracking data history as defined
2 in claim 7 wherein each of said at least a product performance test protocol has
3 a pass or fail outcome, and wherein the method further comprises the step of:
4 creating a product defect file in said central data repository when
5 a fail result occurs upon execution of said at least a product performance test
6 protocol.

1 9. A method for building a product data tracking history as defined
2 in claim 8 wherein said product defect file comprises at least said test identity
3 code for said product performance test protocol resulting in said fail result.

1 10. A method for building a product tracking data history as defined
2 in claim 1 wherein the method is for manufacturing a product for a product
3 owner by at least an external contractor, the at least an external contractor
4 connected to the communications network, and wherein the central computer
5 device connected to said network is under control of the product owner,
6 wherein the method further comprises the step of:

7 connecting the product to the communications network while the
8 product is at the external contractor; and,

9 wherein said step of remotely operating said diagnostic tool over
10 the communications network comprises remotely operating said diagnostic tool
11 while the product is at the at least an external contractor.

1 11. A method for building a product tracking data history as defined
2 in claim 10 wherein the method further comprises the step of:

3 assigning each of the at least an external contractor a unique
4 contractor code, and wherein said product specification data further comprises
5 said unique contractor code.

1 12. A method for building a product tracking history as defined in
2 claim 11 wherein the at least an external contractor comprises a plurality of
3 external contractors.

1 13. A method for building a product tracking data history for a
2 product manufactured for a product owner by at least an external contractor, a
3 communications network connecting the product owner with each of the at
4 least an external contractors, a central computer device controlled by the
5 product owner connected to the communications network, the method
6 comprising the steps of:

7 installing a diagnostic tool on the product, said diagnostic tool
8 being of the type which is capable of reporting specification data about the
9 product;

10 assigning a unique product identity code to the product;

11 connecting the product to the communications network when the
12 product is at the at least an external contractor;

13 remotely operating said diagnostic tool over the communications
14 network with the central computer device to report product specification data
15 to a central data repository connected to the central computer device, said
16 product specification data comprising at least said unique product identity
17 code; and,

18 building the product tracking data history from said central data
19 depository using said product specification data.

1 14. A method as defined in claim 13 wherein said diagnostic tool
2 comprises at least computer executable instructions recorded on a computer
3 accessible medium.

1 15. A method for building a product tracking data history as defined
2 in claim 14 wherein said diagnostic tool recorded computer executable
3 instructions comprise at least instructions for determining an inventory of
4 installed components on the product, means for storing said unique product
5 identity code, and wherein said product specification data further comprises an
6 inventory of components installed on the product.

1 16. A method for building a product tracking data history as defined
2 in claim 13 wherein said step of building the product tracking data history from
3 said central data depository using said product specification data further
4 comprises assigning said unique product identity code to the product tracking
5 data history.

1 17. A method for building a product tracking data history as defined
2 in claim 13, wherein the method further comprises the step of:
3 placing at least a set of product assembly specifications in said
4 central data repository whereby the at least an external contractor may access
5 said at least a set of product assembly specifications remotely over the
6 communications network to build the product.

1 18. A method for building a product tracking data history as defined
2 in claim 17 wherein the at least an external contractor has an operator computer
3 device connected to the communications network, and wherein the method
4 further comprises the steps of:
5 assigning a unique product assembly specification code to each of
6 said at least a set of product assembly specifications;
7 transmitting said at least a set of product assembly specifications
8 over the communications network to the operator computer device; and
9 wherein said product specification data remotely reported over
10 the communications network from said diagnostic tool further comprises said

11 unique product assembly specification code corresponding to said at least a set
12 of product assembly specifications transmitted to the operator computer device.

1 19. A method for building a product tracking data history as defined
2 in claim 13 wherein the method further comprises the steps of:

3 providing at least a product performance test protocol for testing
4 the performance of the product; and,

5 placing said at least a product performance test protocol in said
6 central data repository whereby said at least a product performance test
7 protocol may be transmitted over the communications network to the at least an
8 external contractor.

1 20. A method for building a product tracking data history as defined
2 in claim 19 wherein said step of remotely operating said diagnostic tool over
3 the communications network further comprises causing said diagnostic tool to
4 execute said product performance test protocol, and wherein said product
5 specification data reported by said diagnostic tool further comprises results
6 from execution of said product performance test protocol.

1 21. A method for building a product tracking data history as defined
2 in claim 20 wherein the method further comprises the step of assigning a
3 unique test identity code to each of said at least a product performance
4 protocol, and wherein said product specification data reported by said
5 diagnostic tool further comprises said unique test identity code corresponding
6 to said performance test protocol.

1 22. A method for building a product tracking data history as defined
2 in claim 21 wherein each of said at least a product performance test protocol
3 has a pass or fail outcome, and wherein the method further comprises the step
4 of creating a product defect history file in said central data repository upon
5 occurrence of said fail result.

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1 23. A method for building a product tracking history as defined in
2 claim 22 wherein said product defect history comprises at least said product
3 performance test identity code corresponding to said product performance test
4 resulting in said fail outcome.

1 24. A method for building a product tracking history as defined in
2 claim 13 wherein the at least a contractor comprises a plurality of contractors;
3 each of the plurality of contractors connected to the communications network
4 whereby each of the external contractors may interface with said central data
5 repository, and wherein the method further comprises the step of:

6 assigning each of the plurality of external contractors a unique
7 contractor code;

8 wherein said step of remotely operating said diagnostic tool over
9 the communications network further comprises connecting the product to the
10 communications network when the product is at each of the plurality of
11 contractors;

12 prompting said diagnostic tool to provide said unique contractor
13 code corresponding to the contractor where the product is; and,

14 wherein said product specification data reported over the
15 communications network to said central data repository further said unique
16 contractor code.

1 25. A method for building a product tracking data history for a
2 product being manufactured for a product owner by at least an external
3 contractor, the product owner and at least an external contractor connected to a
4 communications network, the product owner controlling a central computer
5 device connected to the communications network, each of the at least an
6 external contractors having an operator computer device connected to the
7 communications network for use in at least a portion of the product
8 manufacture, the method comprising the steps of:

13 assigning a unique product identity code to the product, said
14 unique product identity code accessible by said diagnostic tool;

15 assigning a unique contractor code to each of the at least an
16 external contractor;

17 providing at least a set of product assembly specifications;

18 assigning each of said at least a set of product assembly
19 specifications a unique identity code;

20 placing said at least a set of product assembly specifications on
21 the central computer device;

22 providing at least a product performance test protocol; assigning
23 each of said at least a product performance test protocol a unique test identity
24 code, each of said at least a product performance test protocol having a pass or
25 fail outcome;

26 placing said at least a product performance test protocol on the
27 central computer device;

28 connecting the product to the communications network when the
29 product is at the at least an external contractor;

30 transmitting said at least a set of product assembly specifications
31 over the communications network to the operator computer device at the
32 external contractor when the product is connected to said communications
33 device;

40 contractor identity code corresponding to the external contractor said set of
41 product assembly specifications are transmitted;

46 building the product data history with the central computer
47 device;

48 assigning said unique product identity code to the product data
49 history, the product data history comprising at least, said inventory of
50 components installed on the product, said unique contractor code
51 corresponding to the contractor the product is, said product assembly
52 specifications identity code corresponding to said at least a set of product
53 assembly specifications being transmitted over the communications network to
54 the operator computer device, said performance test identity code for each of
55 said at least a performance test protocol executed by said diagnostic tool with
56 corresponding of said performance test results; and,

57 creating a product defect tracking history with the central
58 computer device upon a fail result after execution of any of said at least a
59 product performance test protocols, said product defect history comprising at
60 least said test identity code for said at least a product performance test protocol
61 resulting in said fail result.

1 26. A method for creating a product tracking data history file as
2 defined in claim 25 wherein the at least an external contractor comprises a
3 plurality of external contractors.

1 27. A computer program product for causing a computer to create a
2 product tracking data history file for a product, the product comprising
3 processor means and having a unique product identity code, the product having
4 a diagnostic tool installed therein, the diagnostic tool of the type capable of

5 reporting product specification data, the computer program product comprising
6 a computer usable medium having computer readable program code embodied
7 in the medium, the computer usable medium on a central computer that is
8 connected to a communications network, the computer program product when
9 executed causing the central computer to:

10 remotely operate said diagnostic tool over the communications
11 network when the product is connected to the communications network to
12 report product specification data to a central data repository connected to the
13 central computer device, said product specification data comprising at least
14 said unique product identity code; and,

15 build the product tracking data history from said central data
16 depository using said product specification data.

1 28. A computer program product as defined in claim 27, wherein at
2 least one set of product assembly specifications are stored in said central data
3 depository connected to the central computer device, the product assembly
4 specifications having a unique identity code, and wherein the computer
5 program product when executed causes the central computer to:

6 transmit said set of product assembly specifications to an operator
7 computer device connected to the communications network, the operator
8 computer device for use in at least a portion of the manufacture of the product;
9 and,

10 wherein said product specification data reported by said
11 diagnostic tool further comprises said unique identity code corresponding to
12 said product assembly specifications being transmitted to the operator
13 computer device.

1 29. A computer program product as defined in claim 27, wherein at
2 least one product performance test protocol is stored in said central data
3 depository connected to the central computer device, each of said at least a

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4 performance test protocols having a unique test identity code, and wherein the
5 computer program product when executed causes the central computer to:

8 wherein said product specification data reported by said
9 diagnostic tool further comprises product performance test results and said
10 unique test identity code corresponding to said at least a product performance
11 test protocol being executed.

30. A computer program product for causing a computer to create a product tracking data history file for a product, the product comprising processor means and having a unique product identity code, the product having a diagnostic tool installed thereon, the diagnostic tool of the type capable of reporting product specification data, the product being manufactured for a product owner by an external contractor, a unique contractor code assigned to the external contractor, the computer program product comprising a computer usable medium having computer readable program code embodied in the medium, the computer usable medium on a central computer that is connected to a communications network, the product connected to the communications network at the external manufacturer, the computer program product when executed causing the central computer to:

13 transmit a set of product assembly specifications stored on the
14 central computer over the communications network to an operator computer
15 device at the external contractor, the operator computer device for use in at
16 least a portion of the product manufacture, the set of product assembly
17 specifications having a specification identity code;

23 said product specification data comprising at least the unique product identity
24 code, the unique contractor code, an inventory of components installed on the
25 product, said unique product specification code corresponding to said set of
26 product assembly specifications transmitted over the communications network,
27 performance test results resulting from executing said product performance test
28 protocol, said test identity code corresponding to said product performance test
29 protocol executed;

30 build the product data history;

31 assign the unique product identity code to the product data
32 history, the product data history comprising said inventory of components
33 installed on the product, the unique contractor code corresponding to the
34 external contractor the product, said product assembly specifications identity
35 code corresponding to said set of product assembly specifications being
36 transmitted over the communications network to said operator computer
37 device, said test identity code for said performance test protocol executed by
38 said diagnostic tool with corresponding of said performance test results; and,

39 create a product defect tracking history with the central computer
40 device upon a fail result for any of said at least a product performance test
41 protocols, said product defect history comprising at least the unique product
42 identity code and said test identity code for said at least a product performance
43 test protocol resulting in said fail result.